



# MEMORANDUM OF UNDERSTANDING Between THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY And SL GREEN REALTY CORP.

# I. Purpose

The purpose of this Memorandum of Understanding (MOU) is to formally create a mutually beneficial working relationship between the United States Environmental Protection Agency (EPA) and SL Green Realty Corp. (SL Green).

# II. Background

The mission of the Environmental Protection Agency (EPA) is to protect human health and the environment. EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The Agency works through its headquarters and regional offices partnering with over 10,000 industries, businesses, non-profit organizations, and state and local governments, on over 40 voluntary pollution prevention programs and energy conservation efforts. EPA advances efforts to develop an environmentally conscious and responsible public, and to inspire personal responsibility in caring for the environment.

- SL Green has informed EPA that it is one of the largest commercial real estate owners, and operators within New York City and the greater metro area. Comprised of approximately 72 properties, primarily throughout New York City, Westchester County, Fairfield County, and New Jersey, SL Green is responsible for over 29 million square feet of Class A Commercial office space, with its Tenants ranging from small businesses to Fortune 500 companies.
- SL Green recognizes the significant impact of the commercial real estate sector on the environment, which accounts for 39% of energy use, 12% of total water consumption, 68% of total electricity consumption, and 38% of carbon dioxide emissions. By implementing sustainable processes, along with comprehensive evaluation and measurement of its operating practices, SL Green has and will continue to reduce its energy consumption, waste production, water usage, environmental impacts, and overall carbon footprint across its operations.

SL Green launched its sustainable program that focuses on a broad platform of initiatives. To date, some of SL Green's most noteworthy accomplishments include:

- Received a LEED EB (Existing Building) Silver Certification at 100 Park Avenue, in Manhattan, New York in 2009. In 2011, received a LEED EB (Existing Building) Gold Certification at 360 Hamilton Avenue in White Plains, New York.
- Expansion of its construction recycling program to include carpet and ceiling tile in addition to scrap metal. Since 2007, SL Green has recycled over 1,200,000 square feet of combined material, diverting over 500 tons of debris from landfills.
- Installation of an on-site renewable solar energy system consisting of 100kw photovoltaic solar panels at 500 West Putnam Avenue in Greenwich, Connecticut.
- Received Energy Star Labels for fifteen (15) buildings in 2011.
- Provides Green Cleaning and expanded Recycling Services throughout its portfolio. Green Cleaning includes the use of environmentally friendly cleaning products developed in association within the LEED EB standard guidelines. Recycling services is a comingle program to include paper, cardboard, plastic, glass & aluminum.

Additionally, SL Green aims to promote environmental performance in the conduct of its business activities, and to proactively engage its Tenants in addressing the efficient use of energy, water and materials, and reductions of greenhouse gas emissions.

# III. Memorandum of Understanding (MOU) Commitments

The Parties recognize the importance of collaboration to address environmental issues in the commercial real estate sector. Consequently, the Parties hereby establish a working relationship. Under this MOU, SL Green undertakes commitments to implement environmental practices in SL Green corporate offices and in properties it owns and operates, to the extent that individual Tenants agree to participate. SL Green's commitments include, but are not limited to the following:

# A. Energy Management and the EPA ENERGY STAR Program

#### Energy Usage and Carbon Footprint Reduction

With regard to energy and carbon footprint reduction, SL Green will give consideration to the energy efficiency of the core & shell as indicated by an ENERGY STAR rating, and to whether the core & shell has achieved certification under a recognized green building rating system such as or similar to Leadership in Energy and Environmental Design (LEED).

Under the MOU, SL Green will continue to partner with the EPA ENERGY STAR Program and promote energy efficiency by implementing environmental best practices, including:

- Lighting management strategies such as the use of energy efficient lighting, motion sensors, and turning off lights when spaces are not in use.
- Plug load reduction of office equipment, such as enabling power save mode on office equipment, and shutting down equipment during non-working hours.
- For sustainable purchasing, see section C "Waste Minimization, Recycling, Purchasing Recycled Products and the EPA WasteWise Program"

Improving operational energy efficiency at SL Green owned and operated properties is a key component of SL Green's facility and property management service offering. SL Green strives to improve Energy Star scores through identification of energy conservation opportunities.

SL Green completed the Energy Star Benchmarking Process on its entire managed portfolio as of August 1, 2011

SL Green's energy assessment and reduction plans under this MOU currently include:

- The completion of benchmark energy performance ratings in all properties it owns and operates using the EPA ENERGY STAR Portfolio Manager tool.
- The firm will make education available to appropriate personnel involved in building operations, with the goal of ensuring that building equipment is efficiently maintained and utilized.
- By endorsing the Building Owners and Managers Association (BOMA) Seven Point Challenge, SL Green is committed to decreasing energy consumption across its managed portfolio.
- Reporting on energy consumption using the ENERGY STAR Portfolio Manager Program or in SL Green's annual MOU updates.
- Continue to promote at least a 10% energy reduction goal in at each property.

SL Green recognizes the opportunities for high-performing buildings such as the EPA ENERGY STAR label and certification from the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED). In addition to its own efforts, SL Green encourages its Tenants to pursue recognition opportunities as well

# Alternative Energy and Carbon Footprint Reduction

#### Corporate Offices

SL Green will evaluate opportunities, for selected offices, to purchase green power in the form of renewable energy certificates for a portion of the electricity use associated with occupation of its tenant space.

# Owned and Operated Properties

In addition to successful implementation of energy savings measures and achievement of increased efficiency, SL Green will continue to examine opportunities for alternative energy including:

- (1) On-site renewable energy generation, such as solar or wind power or other renewable sources; and
- (2) Off-site renewable energy purchases, such as green power produced from solar or wind, or other renewable sources.

# **B.** Water Management

#### Water Conservation and WaterSense Products

- SL Green recognizes that water-efficiency programs can result in savings in the cost of water, sewer, and energy.
- SL Green will initiate a pilot program in selected offices to assess the specifications of the standard fixtures. Where appropriate, SL Green will encourage building management to install water efficient equipment such as EPA's WaterSense endorsed products.
- SL Green will benchmark water usage in all eligible properties under management using the EPA ENERGY STAR Portfolio Manager tool.

In the renovation or upgrade of properties, SL Green will encourage the use of efficient plumbing fixtures (low flow, high efficiency and waterless), and, where appropriate, products recognized by the EPA WaterSense Program. In addition, the use of faucet aerators in sinks and adjustments to flush valves will be encouraged.

In order to further reduce water usage, SL Green will work with Tenants to implement best practices in building operations designed to improve efficiency and preventative maintenance programs.

SL Green will provide an estimate on water usage where such data is available using the ENERGY STAR Portfolio Manager Program or in SL Green's annual MOU updates.

# C. Waste Minimization, Recycling, Purchasing Recycled Products and the EPA WasteWise Program

#### Solid Waste

SL Green recognizes that solid waste management programs can result in operational cost savings through reduced purchasing and disposal costs, while reducing greenhouse gases by conserving raw materials. SL Green will consider joining EPA's Waste Wise Program as a Partner to continue its current program designed to reduce the solid waste stream and increase recycling practices and sustainable purchasing.

Currently, SL Green collects and recycles paper, cardboard, metal, plastic and electronics. Further, SL Green shall consider alternative opportunities to enhance current source separation and material recycling for which a new or emerging market exists, including but not limited to: paper, cardboard, news print, metal, glass, plastic containers and electronics.

#### Corporate Offices

Should SL Green join the WasteWise Program, SL Green will continue its current program to conduct an assessment of current waste reduction activities and to document sustainable purchases. Where applicable, provisions of the SL Green Solid Waste and Sustainable Purchasing Policies developed for the owned and operated properties and referenced in section D below would be implemented.

# Owned and Operated Properties

SL Green will encourage its Tenants to participate in the WasteWise Program by assessing current waste reduction activities, documenting sustainable purchases and implementing practices to reduce, reuse, recycle and manage waste effectively. The WasteWise Program complements SL Green's Solid Waste and Sustainable Purchasing Policies.

# Food Waste

In 2010, just under 35 million tons of food waste was generated. Of that, almost 34 million tons (97%) was thrown away into landfills or incinerators. When excess food, leftover food, and food scraps are disposed of in a landfill, they decompose and become a significant source of methane — an extremely potent greenhouse gas. Much of this "waste" is not waste at all, but actually safe, wholesome food that could potentially feed millions of Americans. Leftovers and scraps that are not fit for consumption and donation can be used to feed the soil by recycling (composting) food waste into a nutrient rich soil amendment.

Under the Green MOU, SL Green will promote food waste reduction to tenants and food vendors. SL Green will consider incorporating food waste reduction language in tenant leases and food vendor contracts regarding practices such as modifying food purchasing, changing food production and handling practices, reducing excessive portion size, donations to the needy, and composting/anaerobic digestion.

#### **D.** Green Operations & Maintenance Practices

#### SL Green Green Practice Policies

Under the MOU, SL Green shall review current operations manuals and consider green practice policies outlining sustainable approaches to building operations. The policies cover pest management, construction, purchasing, cleaning, solid waste management and recycling, and control of environmental tobacco smoke. Green practice policies shall be developed using the LEED EB: Operations & Maintenance rating system as a reference framework. Policies will be implemented as appropriate and in consideration of SL Green's individual properties.

# • Solid Waste Management:

The Operations Manual will promote waste prevention strategies such as material reuse centers, paper reduction, electronic file transfer, storage, and education. The Operations Manual will further provides direction on electronic waste recycling, recycling of standard and harder to recycle products including hazardous and organic waste streams.

#### • Sustainable Purchasing:

The Operations Manual will cover packaging, recycled content, sustainable purchasing of ongoing consumables (printing and copying paper, etc), durable goods (computers, monitors, copiers, printers, scanners, fax machines, refrigerators and other appliances), and energy efficient and reduced mercury content light bulbs.

# • Integrated Pest Management:

The Operations Manual will outline control strategies intended to reduce the need for chemical application and include: environmental, mechanical, organic and chemical controls. The policy sets out requirements for subcontractors who apply pesticides.

# • Green Cleaning:

The Operations Manual will cover custodial cleaning contract specifications, program principles, general green cleaning solutions guidelines, cleaning and preventative measures to reduce dust, dirt and microbial growth, special treatment of carpets, janitorial training requirements, chemical storage guidelines, and cleaning equipment standards and specifications.

# • No Smoking:

The Operations Manual will provide for non-smokers' preferences by avoiding conflict between smoking and non-smoking occupants. It includes guidelines for minimal exposure of indoor surfaces and systems to smoke.

# Landscaping and EPA's GreenScapes Program

SL Green recognizes that environmentally beneficial landscaping practices can reduce waste, conserve water, reduce energy usage, and reduce the use of hazardous substances. The firm shall review EPA's GreenScapes Program Tip Sheets and encourage its clients to implement EPA GreenScapes Program landscaping practices.

SL Green will evaluate opportunities to incorporate environmental criteria. SL Green shall review the GreenScapes Program and consider green landscaping activities designed to reduce potable water use and the production of waste, and to promote the reuse and recovery of products that might otherwise be disposed of (e.g., plastics, green trimmings, food waste).

#### Storm Water Management and the Use of Green Infrastructure Techniques

Runoff occurs when land is covered with buildings, streets and parking lots. Rainwater runs off these hard surfaces, picking up chemicals, sediment and other pollutants and sending them into local waterways. The rush of water from drainage pipes can cause erosion, and warmer runoff in the summer can change water temperature, hurting fish, plants and animals.

In New York City, more than 27 billion gallons of raw sewage and polluted storm water a year are discharged into the New York harbor estuary and its tributaries from combined sewer overflows. Combined pipe makes up about 65% of New York's sewer system, and although the city has spent billions of dollars on traditional storm-water controls such as temporary storage tanks, it still has impaired waters from runoff.

Under the Green MOU, SL Green will incorporate, where feasible, low impact development techniques in future construction/renovation activities that will be designed to hold, re-use or allow the storm water to percolate the soil to the groundwater. Techniques such as green roofs, permeable pavements, swales, rain gardens, rain barrels, compost socks for erosion control, etc., will be considered in any new projects that will reduce runoff during storm events.

#### Clean Construction USA

SL Green will consider EPA's Clean Construction USA Program to cooperatively promote and implement measures to effectively reduce emissions from vehicles and other internal combustion engines used in construction and operation of SL Green facilities, with a focus on diesel engine emission reductions. Clean construction equipment reduces pollution from conventional diesel fuel-powered construction vehicles and equipment by requiring the use of Ultra-Low Sulfur Diesel (ULSD) fuel and best available pollution control retrofit technologies. SL Green will strive to include the use of clean construction equipment and clean fuel use in its specifications for contractors working on future facility construction projects. Clean construction equipment includes retrofit technologies for construction vehicles such as Diesel Particulate Filters (DPFs). In combination with the use of cleaner ULSD fuel, this practice will greatly reduce construction vehicle emissions during construction.

Enhanced Idling Reduction - Enhanced idling reduction measures reduce fuel consumption and pollution by setting a reasonable time limit for idling and actively encouraging that this limit be followed. SL Green will consider implementing idling reduction measures, and encourage its service vendors, contractors, and staff to do the same.

# E. Projects Pursuing Leadership in Energy and Environmental Design (LEED) Certifications

SL Green will evaluate opportunities to pursue a LEED certification (or equal rating system) for its properties.

SL Green will encourage its Tenants to incorporate green building standards in the design and construction of new buildings and tenant improvement projects using the LEED for Commercial Interiors rating systems.

#### F. Measurement and Reporting

In addition to the reporting items associated with EPA Partnership Programs, SL Green will submit an annual status report to EPA starting one year after the mutual execution of this MOU. The report will include an update on the various activities identified herein. EPA will use this data to determine the environmental benefits associated with SL Green's "green" activities.

#### IV. Terms and Conditions

This MOU is not a contractual or a financial obligation instrument. Nothing in this MOU shall obligate EPA or SL Green to expend appropriations or to enter into any contract or other

obligations or be cited as the basis for the promise or transfer of funds. Collaboration under this MOU shall be in accordance with applicable statutes and regulations.

This MOU does not restrict EPA or SL Green from participating in similar activities or arrangements with other entities or Federal agencies (domestic or foreign).

Either Party may unilaterally withdraw at any time from this MOU by transmitting a signed writing to that effect to the other Party. By mutual agreement, which may be either formal or informal, the Parties may modify the list of intended activities set forth in Section III above, and/or determine the practical manner by which the goals, purposes and activities of this MOU will be accomplished. Modification to other written parts of this MOU must be made in writing and signed by both Parties or their designees.

Nothing in this MOU shall be construed to authorize or permit any violation of any Federal, State or local law, including, but not limited to, any environmental law administered and/or enforced by EPA.

Access to all documents generated pursuant to the activities set forth in this MOU that constitute agency records for purposes of the Freedom of Information Act ("FOIA"), 5 U.C.S. 552 shall be governed by the provisions of the FOIA.

SL Green agrees that it does not expect, nor will it ever seek to compel from EPA in any judicial forum, the payment of money, services or other thing of value from EPA based upon the terms of this MOU. The foregoing provision does not in any way affect any legal rights accruing to SL Green by virtue of any other law, contract and/or assistance agreement.

SL Green understands and acknowledges that, as an institution of the Federal Government, EPA has a duty to refrain from providing any commercial entity an exclusive privilege without receiving payment therefore and, as a consequence, that EPA's relationship with SL Green in no way affects, alters or otherwise constrains EPA's right to provide similar (or identical) services to, or establish similar (or identical) relationships with, any other entity.

SL Green understands that EPA's participation in this MOU does not constitute an endorsement, express or implied, of (a) any policy advocated by SL Green or (b) any goods or services purchased, offered or sold by SL Green or (c) any product or products solely by virtue of carrying the WaterSense or Energy Star label. SL Green agrees not to make statements to the public at workshops or meetings, in promotional literature, on its Web site, or through any other media that imply that EPA endorses SL Green or any service or product offered by SL Green. SL Green is free to publicize the existence of this MOU.

The parties agree that any copyrightable subject matter, including but not limited to journal articles, training, educational or informational material or software, created jointly by the parties from the activities conducted under the MOU may be copyrighted by SL Green. SL Green hereby grants to EPA a royalty-free, nonexclusive, irrevocable right to reproduce, distribute, make derivative works, and publish the work(s) publicly, or to authorize others to do the same on its behalf.

This MOU does not authorize SL Green or the EPA to use the other's logo, trademark or other intellectual property without prior consultation with the other party except as otherwise provided herein. This MOU does not in any way bypass or alter the obligation of SL Green to meet any of the specified requirements and/or procedures associated with the individual partnership programs listed in the MOU.

The EPA enters into this MOU under the authority of Section 103 of the Clean Air Act, 42 U.S.C. §7403, Section 104 of the Clean Water Act, 33 U.S.C. §1254, and Section 8001 of the Solid Waste Disposal Act, 42 U.S.C. §6981, Section 6604 of the Pollution Prevention Act, and Section 324A of the Energy Policy and Conservation Act, 42 U.S.C. §6294a, which provide EPA with authority to undertake cooperative efforts with private organizations to promote the coordination and acceleration of research, studies, training, and other efforts to prevent, reduce and eliminate pollution.

This MOU does not create any right or benefit, substantive or procedural, enforceable by law or equity, by persons who are not party to this MOU, against SL Green or EPA, their officers or employees, or any other person. This MOU does not direct or apply to any person outside of EPA and SL Green.

#### V. Effective Date and Administration

This MOU will become effective upon signature by the Regional Administrator of EPA Region 2 and the CEO of SL Green Realty Corp. or their designees. It may be modified or amended by written agreement between both parties. This MOU will terminate at the end of five (5) years from the date of signature unless revised or extended at that time by written agreement of the parties. It may be terminated at any time by either party upon the issuance of a written notice to the other party. The Parties will review annually the provisions of this MOU and its implementation.

Signed:	
Judith Enck Regional Administrator U.S. EPA Region 2	Jason Black Director of Sustainability SL Green Realty Corp.
Date:	Date: